MHBC | PLANNING URBAN DESIGN & LANDSCAPE ARCHITECTURE

April 11, 2024

Planner, Development Services
City of Barrie
70 Collier Street
P.O Box. 400
Barrie ON

Dear Liam,

**RE: Commemoration Plan for the Property at 34-36, 38, 40, 44, & 50 Bradford Street, City of Barrie (listed under Part IV, Section 27 of the *Ontario Heritage Act*)**
**OUR FILE: 1350 L**

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The purpose of this letter is to provide the City with further information as it relates to the commemoration of the site located at 50 Bradford Street. The concept of the commemoration of the site has changed and is described in this document. The reasons for which the plan for commemoration has change are related primarily to safety, building condition, and feasibility. We are of the opinion that the current plan for commemoration as described in this letter fulfills the recommendations of the Cultural Heritage Evaluation Report drafted by MHBC in 2017.

**Background Summary:**

MHBC prepared a Cultural Heritage Evaluation Report for the property located at 125 Dunlop Street West and 50 Bradford Street (the "subject lands") in 2017 on behalf of Barrie Central Developments Inc. The CHER was undertaken given that the property is listed (non-designated) under *the Ontario Heritage Act*. The CHER identified that the property at 50 Bradford Street West was of Cultural Heritage Value or Interest (CHVI) primarily for its design/physical values of the former West Ward School (later known as the Prince of Wales School), which was constructed in 1876 by Loan and Strong, renovated in 1920 by R.J. Edwards and Son of Toronto. The building includes features indicative of the Romanesque architectural style with Gothic Revival influences. The CHER also identified that the building had been altered over time and the majority of original Romanesque style attributes had been removed.

The CHER was submitted to City of Barrie staff. Information was brought forward to the City of Barrie Heritage Advisory Committee regarding the proposed development of the school in September 2017. The proposal included retaining portions of the school and the removal of contemporary additions.

Following the submission of the CHER, MHBC provided City of Barrie staff with an Addendum to the CHER dated October 2022. The Addendum identified that the development concept had been revised. The building had been altered to remove interior features and the facades of the building had been retained. The Addendum identified impacts as a result of the removal of portions of remaining walls given concerns regarding stability, CPTED (Crime Prevention Through Environmental Design) issues with the proposed amenity space, and concerns regarding integration of the remaining façade walls into the proposed development. The current concept addresses issues related to CPTED and safety by providing an open and highly visible publicly accessible space which deters vandalism and other unsafe activities.

The Addendum identified that the partial removal of façade walls would result in adverse impacts given that the walls include heritage fabric. However, the change in the proposed commemoration method could be mitigated through the completion of documentation, salvage, and commemoration.

**Revised Commemoration Concept:**

Since the time the Addendum was drafted in 2022, we have been in contact with City of Barrie planning staff regarding issues on the subject property and the façade walls. These issues are related to the condition of the building, public safety, and the integration of portions of the walls into the proposed development concept. As a result of these discussions, the proposed commemoration concept has been revised.

Figure 1: View of west wall opening with cracks showing under sills (source: MTE Consultants, 2024)

Figure 2: View of deteriorated bricks at bottom four courses of former front opening (source: MTE Consultants, 2024)

The updated commemoration proposal includes salvaging existing bricks to use within a public area located on-site in order to interpret of the West Ward/Prince of Wales School. The area is proposed to be surrounded by landscaped open space. The area would be paved using crushed brick salvaged from the school as well as gabion seat walls utilizing salvaged bricks. The site would include an interpretive plaque located in an accessible area (noted on Figure 3, below). An updated structural report undertaken in March 2024 has confirmed that enough bricks could be salvaged for pavers and gabion walls. The report also identifies that the bricks are not able to be salvaged for structural purposes given existing masonry issues. A copy of this structural condition report is attached to this letter. The proposed design and renderings for the revised commemoration concept are also attached.

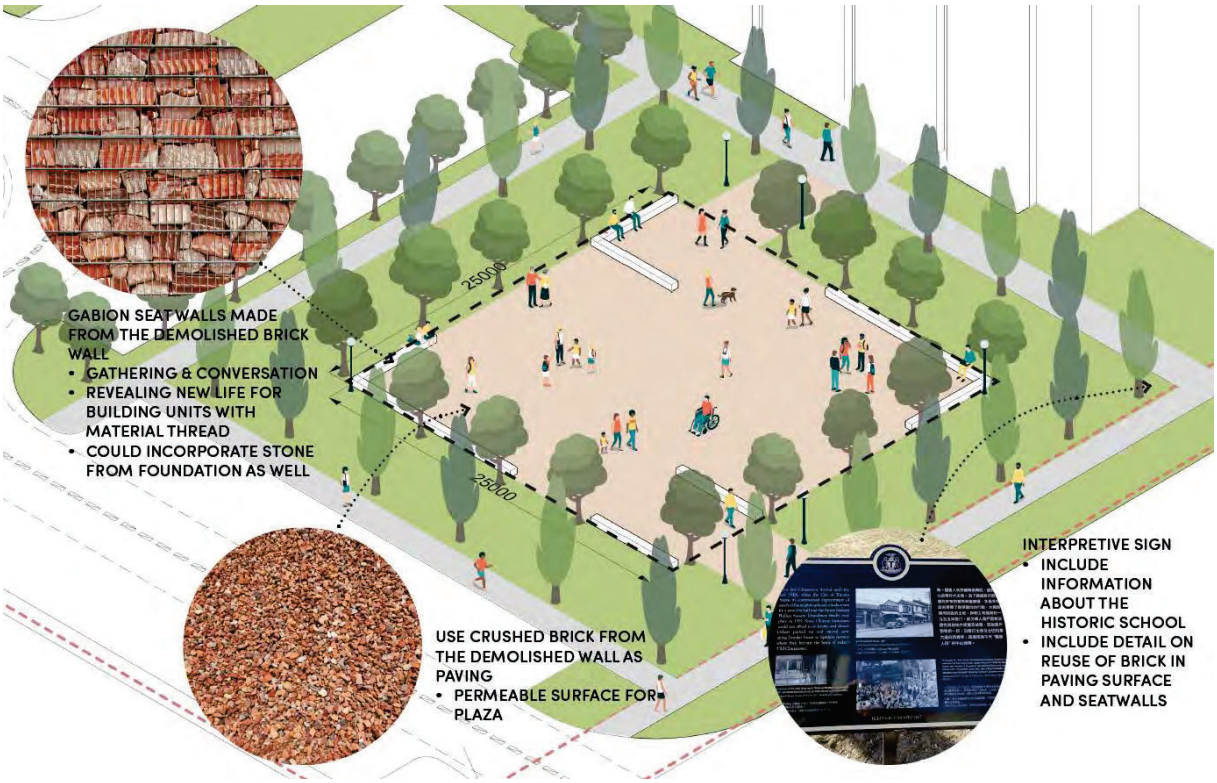



Figure 3: Rendering and diagram of proposed commemoration of the property at 50 Bradford Street (source: The Planning Partnership, 2024)

We will work with staff in drafting content for a plaque using a high quality design and materials which incorporates maps and images. The intent of the plaque is to interpret the history of the West Ward/Prince of Wales School and draw attention to salvaged materials. A sample design layout completed for a different project in a different municipality is provided below:

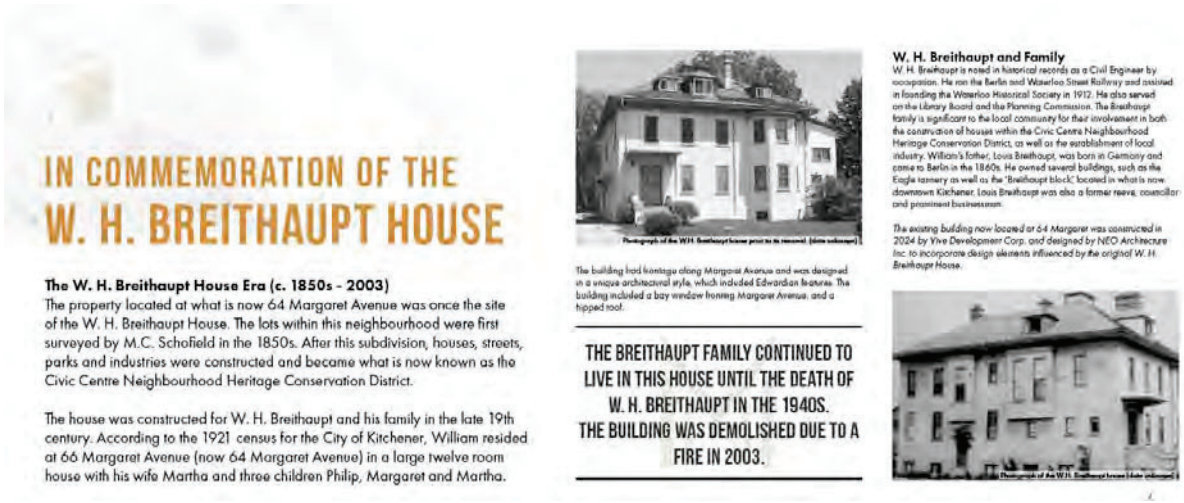



Figure 4: Sample interpretive plaque design in a different municipality in Ontario (Source: MHBC, 2024)

**Recommendations:**

We are of the opinion that the current plan for commemoration fulfills the recommendations of the Cultural Heritage Evaluation Report drafted in 2017. We recommend that this information be provided to the City of Barrie Heritage Advisory Committee in April 2024 in order to fulfill the requirements of the *Ontario Heritage Act* related to the removal of structures on listed properties. We are available to attend this meeting in order to answer any questions posed by the Committee.

Yours truly,

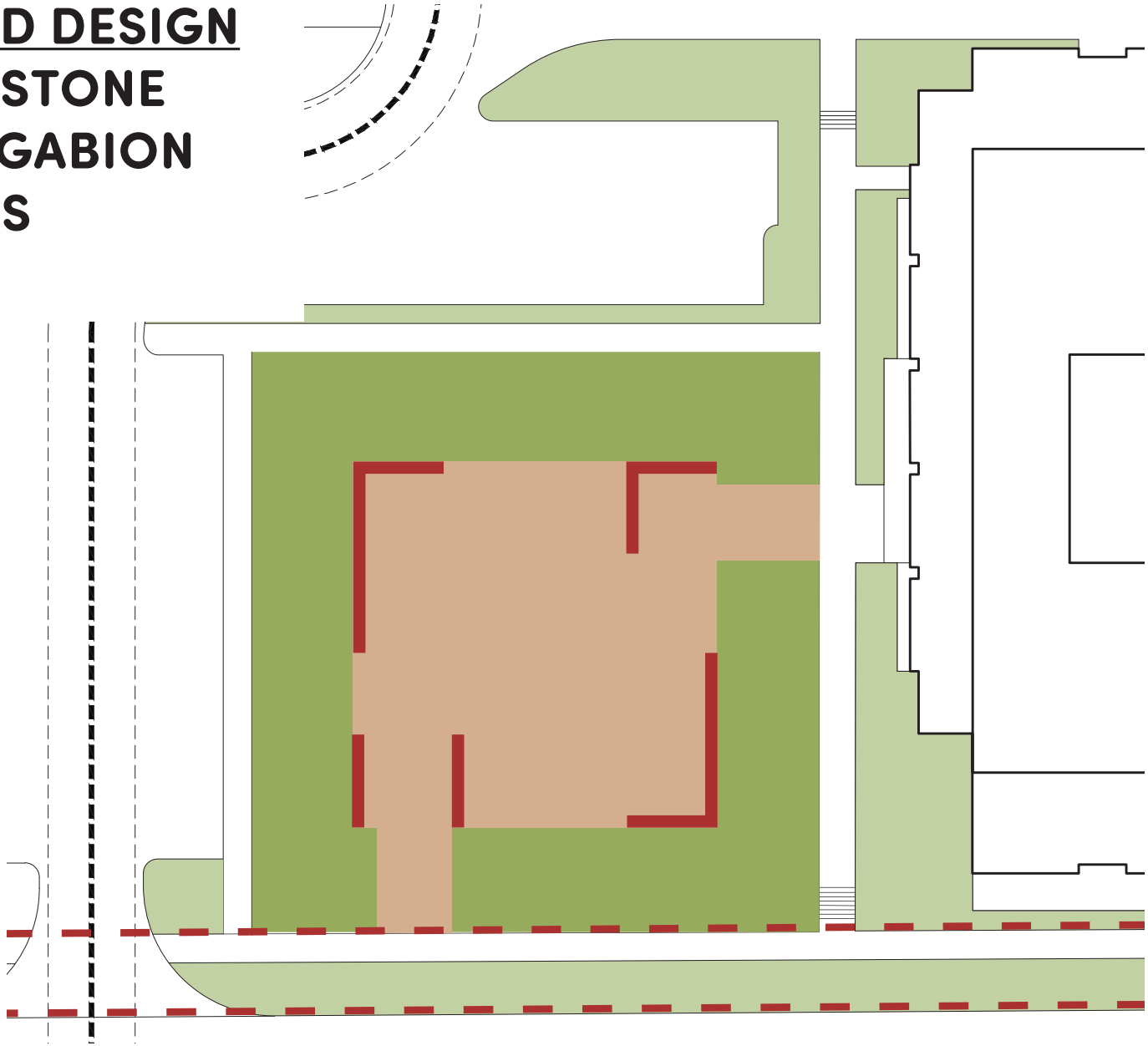
Vanessa Hicks
MHBC

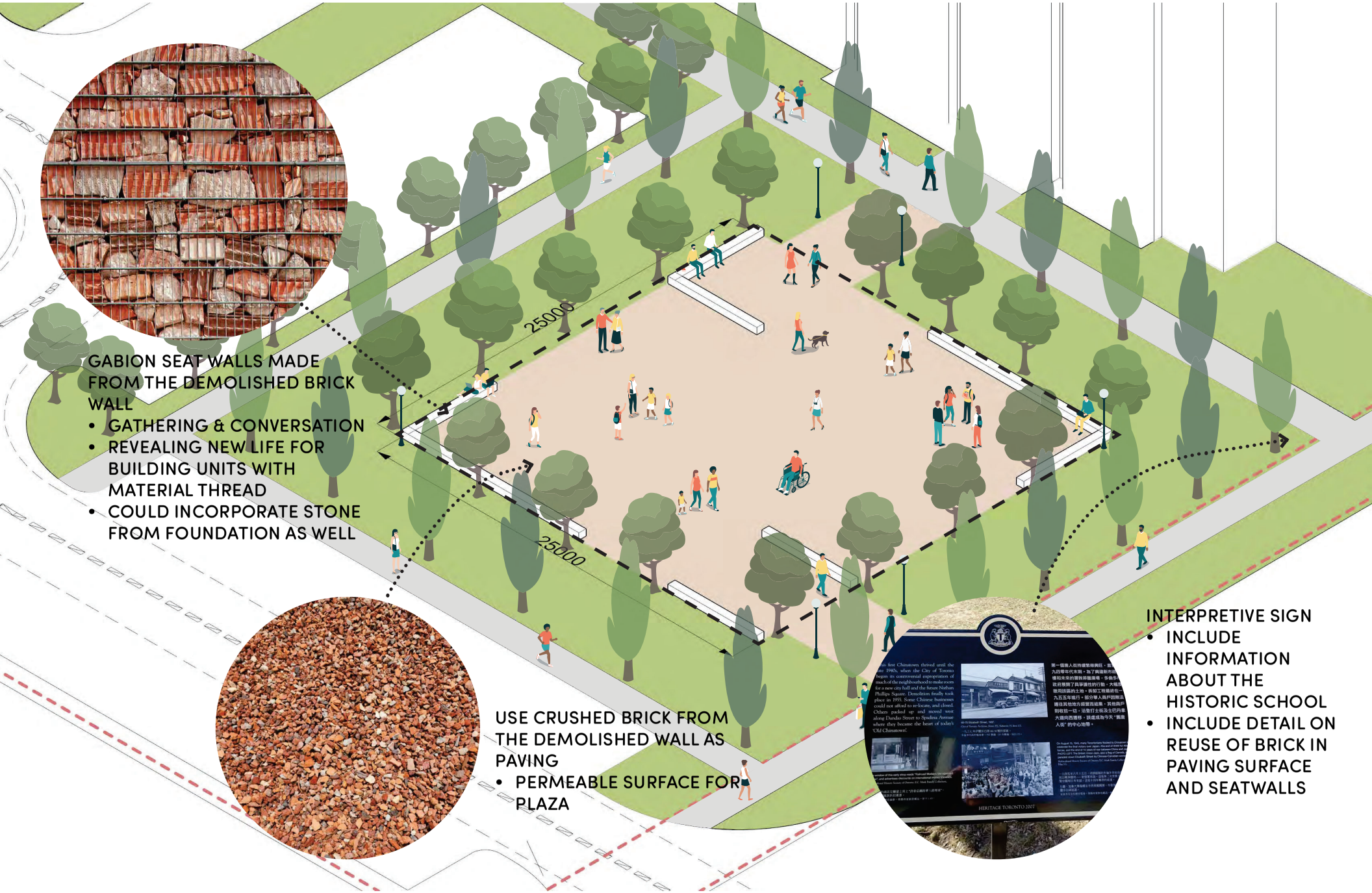
*cc. Celeste Kitsemetry, City of Barrie*
*cc. Dan Currie, MHBC*
*cc. Trevor Hawkins, MHBC*
*cc. Joel Doherty, HIP Developments*

# HIP BARRIE PARKETTE
# PREFERRED DESIGN

THE PLANNING PARTNERSHIP
MARCH 2024

# PREFERRED DESIGN
## CRUSHED STONE PAVING & GABION SEATWALLS






GABION SEAT WALLS MADE FROM THE DEMOLISHED BRICK WALL

- GATHERING & CONVERSATION
- REVEALING NEW LIFE FOR BUILDING UNITS WITH MATERIAL THREAD
- COULD INCORPORATE STONE FROM FOUNDATION AS WELL

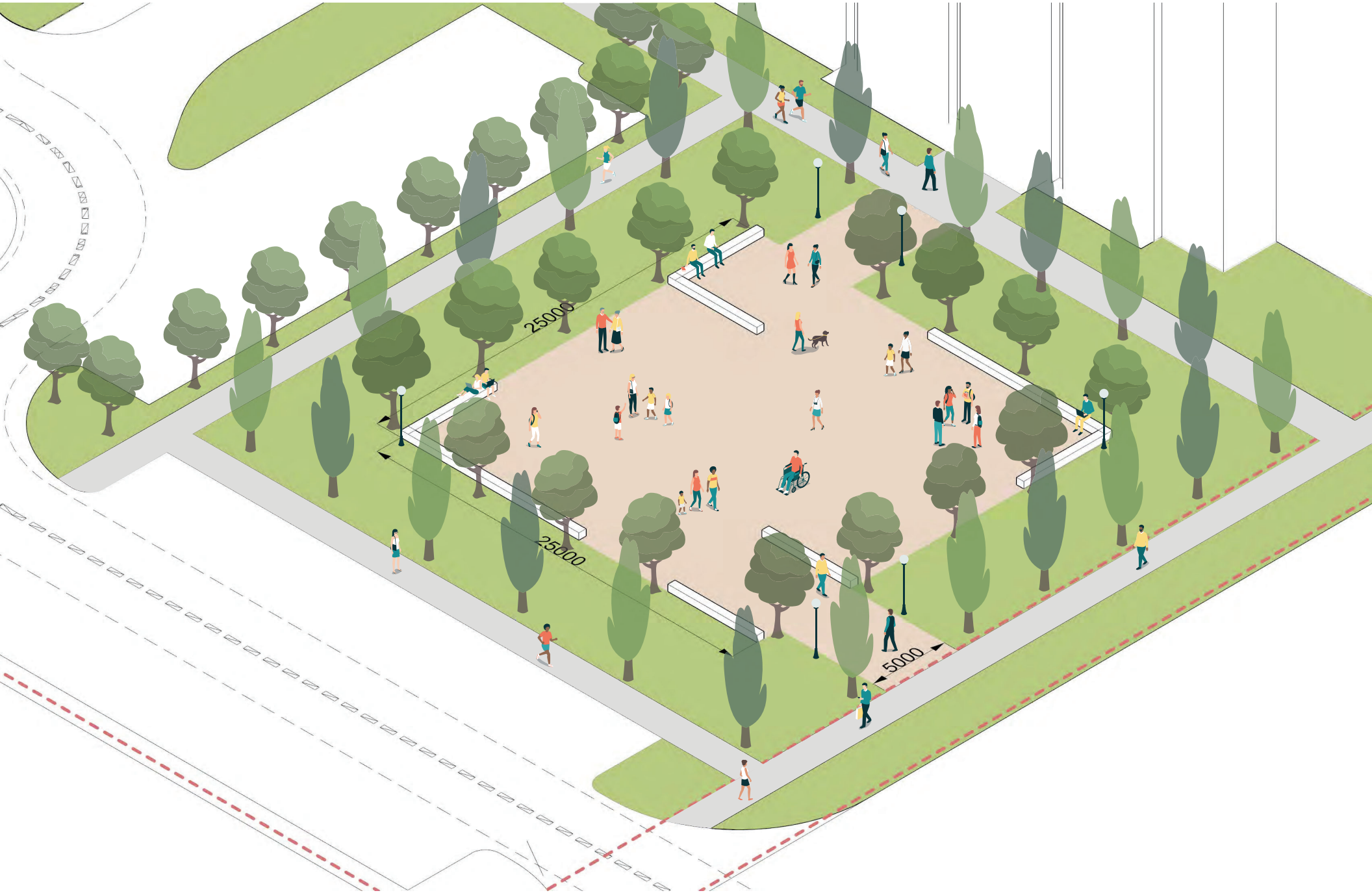
USE CRUSHED BRICK FROM THE DEMOLISHED WALL AS PAVING

- PERMEABLE SURFACE FOR PLAZA

INTERPRETIVE SIGN

- INCLUDE INFORMATION ABOUT THE HISTORIC SCHOOL
- INCLUDE DETAIL ON REUSE OF BRICK IN PAVING SURFACE AND SEATWALLS

# EXAMPLES OF GABION SEATWALLS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MTE Consultants
1016 Sutton Dr., Unit A, Burlington, Ontario L7L 6B8

March 28, 2024

MTE File No.: 41710-301

**RE: Masonry and Temporary Shoring Assessment**
**125 Dunlop Street, Barrie, ON**

On Friday, March 22, 2024, MTE visited the site at 125 Dunlop Street in Barrie ON to conduct an assessment of the masonry walls and their supporting shoring systems. The building was partially demolished in 2018 and the exterior walls were maintained and shored-in-place as the building has been identified as a building of cultural heritage value or interest by the City of Barrie. The existing brick façade of the building is to be disassembled and repurposed into the site redevelopment as part of a commemorative feature within the proposed park space. It is our understanding that the maximum quantity of bricks possible is desired to be integrated into the design of the new commemorative feature. Per the provided concepts, this feature is likely to consist of non-structural elements, including a crushed brick pad and paths and salvaged brick in gabion baskets used as seat walls.

Our mandate was to review the existing condition of the masonry units and establish if and how many of the bricks could be salvaged for re-use.

## DESCRIPTION

The building at 125 Dunlop Street in Barrie ON is a two-storey triple wythe brick masonry structure. The building is listed as a non-designated property of cultural heritage value or interest on the City of Barrie's heritage properties register. The original building was constructed circa 1876 and served as a public school until its closing in 2011.

The original building structure is load-bearing multi-wythe masonry walls supported on masonry stone foundations. The walls are triple wythe and are currently supported by temporary structural steel shoring that was installed in 2018. The floors and roof have been removed from the building. The windows are aluminum punched window inserts that were installed within the original wooden window frames and rough openings. The majority of the windows have had the top pane of glazing removed and replaced with plywood. Some of the window and door locations have been infilled with masonry. The interior plaster remains in place.

Based on our review of the Geotechnical Report prepared by CVD, the supporting soil conditions are a combination of sand and silt. The temporary shoring structure was designed with large reinforced concrete footings to take this into account.

The site is hoarded with chain link construction fencing and secured at the gate with a lock box.

## METHODOLOGY

Our assessment was based on visual review only and we did not undertake destructive testing on the masonry. This was completed from both the exterior and interior side of the building where possible. Additionally, the bricks were hammer-sounded and the mortar was scraped at multiple locations on the exterior. The assessment at the exterior was conducted from grade level and via ladder at several locations along each elevation. No material testing was completed to determine the composition or physical properties of the brick masonry units.

## OBSERVATIONS AND ASSESSMENT

Below is a summary from our visual assessment. Refer to **Appendix A** for photographs of typical conditions and finding described herein.

### Shoring System

The walls are currently shored with structural steel sections supported on reinforced concrete foundations in accordance with the drawings entitled “Prince of Wales P.S. Demolition, S1.0 and S2.0” dated November 2017 prepared by MTE Consultants Inc. The shoring components remain intact and free of signs of distress. We noted that anchorage locations (through-bolts) are in good condition, free of signs of cracking or movement (refer to Photo 4). Based on our review, the temporary shoring system is performing as intended. We did not observe signs of movement or settlement.

We noted that 2 of the second-floor windows are located near the end of a wall section at the middle of the west wall, resulting in small sections of brick at the bottom corner of the window, below the horizontal shoring support (refer to Photo 6). At these locations, we observed that the brick and mortar is cracking and starting to displace slightly from the wall.

### Exterior Wall Construction

The wall assembly consists of the following (from exterior inwards):

- One wythe of 220mm x 100mm x 60mm buff brick with mortar joints ranging between 5mm to 12mm, although majority of the joints are constant at approximately 10mm;
- Second wythe of brick, concealed within the wall;
- A third wythe of similar size to the exterior; and,
- Some isolated areas with ½” plaster coating on the interior.

The brick masonry of the building is generally in fair condition and suitable for re-use in the applications noted within the concepts provided. The mortar was observed to be in fair condition and remained bonded to the brick units, with minimal voids or cracking noted. The mortar remained intact and solid upon scraping. There are some isolated locations of deteriorated mortar adjacent to the former door locations as noted below.

From our hammer-sounding survey, approximately 40% of the bricks were cracked, hollow-sounding, or spalled. These bricks could not be disassembled and re-assembled in a wall configuration (the bricks could not be re-laid). These bricks are suitable for use in a pathway. Some of these bricks may be re-used within Gabion basket seat walls, where the fractured segments are larger than the gaps of the baskets.

The bottom four courses of masonry have experienced the most deterioration and is spalled, cracked and soft when hit with a hammer. These courses of brick are exposed to moisture for prolonged periods of time (snow drift, splash and water-shed). Freeze-thaw cycles have weakened those bricks, and they may not hold up to foot traffic over time (refer to Photo 9). We do not recommend that the bricks from the bottom four courses be reused.

We observed that some bricks are loose at the end walls at previous door locations at grade. These bricks were observed to be in fair condition, but the mortar has failed and resulted in the bricks being loose (refer to Photo 10).

Some sections of the brick are covered in plaster or paint (refer to Photo 14 & 15). At locations adjacent to the plaster (where the plaster had been removed), the exposed bricks are intact, and the face was not compromised by the plaster removal operations. As such, we anticipate that most of the bricks can be re-purposed once the plaster is removed, but we have accounted for 15% of the bricks to be damaged by removal procedures to be conservative, given the proposed use of the materials.

## CONCLUSIONS

The exterior walls have temporary shoring in place and are currently stable and well-supported overall. The temporary shoring is in good condition and is functioning as intended. The shoring system does not require modification.

The deteriorated or spalled bricks are observed at localized areas throughout the structure. The exterior wythe of brick throughout the elevations of the building is in serviceable condition and can be reused as part of the non-load bearing commemorative features that are being proposed in the provided site concepts.

As no destructive openings were conducted in the brick masonry wall construction as part of this assessment and given the majority of the mortar throughout the elevations was found to be intact and solid, we are not able to conclusively comment on the most feasible approaches in removing the bricks so that they remain in salvageable condition for use in deteriorated areas of the elevations that are to remain. The removal process of the brick masonry will need to be carefully conducted by masons that are skilled and experienced in brick reclaiming processes.

## LIMITATIONS

This report has been prepared by MTE Consultants Inc. (MTE) at the request of HIP Developments. The material in it reflects the best judgment of MTE in light of the information available at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibility of such third parties. MTE accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.
This assessment does not wholly eliminate uncertainty regarding the potential for existing or future costs, hazards or losses in connection with a property. No physical or destructive testing and no design calculations have been performed unless specifically recorded.

Conditions existing but not recorded were not apparent given the level of study undertaken. We can perform further investigation on items of concern if so required. Only the specific information identified has been reviewed. The consultant is not obligated to identify mistakes or insufficiencies in the information obtained from the various sources or to verify the accuracy of the information. The Consultant may use such specific information obtained in performing its services and is entitled to rely upon the accuracy and completeness thereof.

Responsibility for detection of or advice about pollutants, contaminants or hazardous materials is not included in our mandate.

In the event the Consultant or any other party encounters any hazardous or toxic materials, or should it become known to the Consultant that such materials may be present on or about the jobsite or any adjacent areas that may affect the performance of the Consultant's services, the Consultant may, at its option and without liability for consequential or any other damages, suspend performance of its services under this Agreement until the Client retains appropriates consultants to identify and abate or remove the hazardous or toxic materials and warrants that the jobsite is in full compliance with all applicable laws and regulations.

Budget figures are our opinion of a probable current dollar value of the work and are provided for approximate budget purposes only. Accurate figures can only be obtained by establishing a scope of work and receiving quotes from suitable contractors. Any time frame given for undertaking work represents an educated guess based on apparent conditions existing at the time of our report. Failure of the item, or the optimum repair/replacement process, may vary from our estimate. We accept no responsibility for any decisions made or actions taken as a result of this report unless we are specifically advised of and participate in such action, in which case our responsibility will be as agreed to at that time. Any user of this report specifically denies any right to claims against the Consultant, Sub-Consultants, their Officers, Agents and Employees in excess of the fee paid for professional services.

Any use which a third party makes of this report, or any reliance on, or decisions to be made based upon it, are the responsibility of such third parties. MTE accepts no responsibility for liabilities incurred by or damages, if any, suffered by any third party as a result of decisions made or actions taken, based on this report. Others with interest in the site should undertake their own investigations and studies to determine how or if the condition affects them or their plans. It should be recognized that the passage of time might affect the views, conclusions and recommendations (if any) provided in this report because environmental conditions of a property can change.

If you have any questions, please contact the undersigned.

Yours Truly,

**MTE Consultants Inc.**

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MBM:axd
Encl. Appendix A – Photographic Log
cc: Kurt Ruhland, kruhland@mte85.com
Michelle Martin, michelle@hipdevelopments.com
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# Appendix A

## Photographic Log

**Photograph No. 1 – View of North East Corner of the Building.**

**Photograph No. 2 – Temporary structural steel shoring facing the North Elevation in the Interior.**


**Photograph No. 3 – Interior view of the temporary shoring connection to the bottom of the wall at the interior.**

**Photograph No. 4 – Through bolts at the mid height of the wall on the exterior south elevation.**

**Photograph No. 5 – Close up of a through bolts.**

**Photograph No. 6 – West wall opening with cracking showing under windows at small remaining cross-section.**

**Photograph No. 7 – Cracking at the west wall below the windows.**

**Photograph No. 8 – Cross section of the triple wythe wall.**

**Photograph No. 9 – Deterioration of bottom four courses of bricks in the interior wythe.**

**Photograph No. 10 – Deteriorated bricks at the bottom four courses at the former front opening.**

**Photograph No. 11 – Isolated spalling observed on the brick surface in the interior wythe of brick.**

**Photograph No. 12 – Some isolated step cracking noted in the brick on the exterior wythe.**

**Photograph No. 13 – Hammer testing was conducted on various areas of the interior and exterior, confirming that the majority of the brick was sound. Testing was conducted with a 24 oz. Framing Hammer.**

**Photograph No. 14 – Some plaster on brick in the interior elevation remains. It appears that the removal process did not impact the face of the brick.**

**Photograph No. 15 – Paint on the brick on the exterior of the west elevation.**